

June 4, 1868.

The Annual Meeting for the election of Fellows was held this day.

Lieut.-General SABINE, President, in the Chair.

The Statutes relating to the Election of Fellows having been read, Mr. Hulke and Capt. Richards were, with the consent of the Society, nominated Scrutators to assist the Secretaries in examining the Lists.

The votes of the Fellows present having been collected, the following Candidates were declared to be duly elected into the Society.

John Ball, Esq., M.A.

Henry Charlton Bastian, M.D.

Lieut.-Colonel John Cameron, R.E.

Prof. R. Bellamy Clifton, M.A.

Morgan William Crofton, Esq., B.A.

Joseph Barnard Davis, M.D.

P. Martin Duncan, M.B.

Peter Griess, Esq.

Augustus George Vernon Harcourt,  
Esq.

Rear-Admiral Astley Cooper Key,  
C.B.

Rear-Admiral Erasmus Ommanney,  
C.B.

James Bell Pettigrew, M.D.

Edward James Stone, Esq., M.A.

Rev. Henry Baker Tristram, M.A.

William Sandys Wright Vaux, Esq.,  
M.A.

Thanks were voted to the Scrutators.

June 11, 1868.

Lieut.-General SABINE, President, in the Chair.

Capt. Sir Leopold M<sup>c</sup>Clintock, R.N., and Rear-Admiral Ommanney, C.B., were admitted into the Society.

The following communications were read :—

- I. "On the Combustion of Hydrogen and Carbonic Oxide in Oxygen under great pressure." By E. FRANKLAND, F.R.S., Professor of Chemistry in the Royal Institution and in the Royal School of Mines. Received June 11, 1868.

In a former communication to the Royal Society\* I described some researches on the effect of a diminution of pressure on some of the phenomena of combustion, and deduced therefrom the law that *the diminution in illuminating-power is directly proportional to the diminution in atmospheric pressure.*

Further experiments, made more than a year ago, on the nature of the luminous agent in a coal-gas flame†, led me to doubt the correctness of the commonly received theory first propounded by Sir Humphry Davy‡, that the light of a gas-flame and of luminous flames in general is due to

\* Phil. Trans. vol. cli. p. 629 (1861).

† Lectures on Coal-gas, delivered at the Royal Institution in March 1867. Journal of Gas-lighting.

‡ Phil. Trans. for 1817, p. 75.